Education for the talented is an investment in the nation's future. Our duty is to search out this talent and to provide all possible facilities and training to develop it. Much work has been done in this field in many countries and several training programmes have been tried successfully. The names of Terman (1877-1956), Oden, Hollingworth (1942), Witty, Gossard, Goswan and others are specially associated with this work. But we in India have not paid much attention it deserves. It is generally believed that intelligence is inherited. All human beings and some highly evolved species of animals are born with some degree of intelligence. Some have a high degree of intelligence, some have average and others have low degree. A child with a high intelligence is a gifted child. According to Kothari (1960), the highly gifted are too creative to be confined within the four walls of the classroom. They have wonderful insight and foresight. An early discovery of genius is must. Proper education and guidance can be given to highly intelligent persons by experts. Talented students of today are the scientists and philosophers of the world of tomorrow.

It is very hard to make these personalities useful to societies. But it is not impossible in the present circumstances. Here are the words of Shri J.P.Naik quoted by Dr.C.Z.Shah:

"Prior to August 1947, most of the leadership needed in the struggle for independence came from the selection of talented persons. Unfortunately the new generation that are coming up are miles away from any thought about social responsibility. It is admitted on all hands that there is a general deterioration in values of life. In such circumstances, the intelligent pupils are getting more and more self-centred..."
as they pass from secondary school to the college and then to the university. In the end, the purpose of life of the most of them is to earn ample money, enjoy different amenities of life without much regard for social responsibility'.

Many naxalites will come out if such selfish and intelligent personalities join together and form a new unit in democracy. No country and society can tolerate this type of situation.

In the under-developed countries, individuals can not get proper employment. Individuals having received secondary and higher educations have to face unemployment in the field where they have been specialised. Moreover, the demand of skillful persons has been increased in rich countries, so persons from thickly populated countries have begun to settle in other countries.

Major part of educated and highly skilled persons has settled in the foreign countries. America is a country which imports highly skillful persons. Looking at some statistical figures, we can realise that more engineers from Iran, South Korea, Tehran are working in America than they are in their own countries.

Talented persons go to the foreign country because they do not get enough opportunity in our country. This happens so because in foreign countries there is no wastage of intellectual wealth and they get enough opportunity and come forward with self-satisfaction.

Due to talented transportation the country has to suffer economic loss with other losses, e.g. they can not get any gain in social welfare scheme, the speed of development of the country becomes slow. The country which makes use of talented personalities develops speedily. As a result the distance between the two countries increases. Thus transportation of talented personalities creates harmful effect on under-developed countries. The philosopher Whitehead says:
'In the modern world, people who don't understand the value of the development of intellectual wealth rushes towards destruction.'

As per Kothari Commission\(^2\) (1966) recommendations about the aim of higher education:

'After finding out brilliant and talented boys and girls their development with their interest, attitude and value of morality and intelligence, proper leadership can be supplied to them in every field of their life.'

Aiming at the secondary level scholarship the National Education Commission\(^3\) has stated:

'Talent search is very important in the secondary. The education department takes up to work of talent search with a view to helping this, every state should arrange testing services. The education institution should develop the educational programme, which develop the abilities of talented students.'

As per Parliamentary Committee:

'For the cultivation of excellence, it is necessary that talent in diverse fields should be identified at early age as early as possible and every stimulus and opportunity should be given for its full development. The scientific techniques should be developed, especially at the secondary stage, to discover and develop talent of all kinds. In the case of exceptionally gifted children, the state should assume total responsibility for their full education. The rules and regulations regarding courses, duration of studies, admission qualifications etc. will have to be suitably relaxed.'
Only little number of Gujaratis are in the public service of the country and at high posts eventhough they are well with solid intellectual power. Why does it happen? To find out what is lacking in the talented students of Gujarat and to find out the means to take them into the row of talented students has become very important and the investigator has been inspired to make a search on this important point.

1.1. SIGNIFICANCE OF THE STUDY

An important objective of education is to prepare the gifted youngster to be creators of ideas, to be innovators and to be leader on the progressive path of human development. This requires the knowledge of who are gifted along with an early identification of these 'gifted' children in different schools.

According to the suggestion of the different education commissions talented students are searched in our country with National Talent Search Scheme (NTSS). With this scheme the test of students studying in standard X is taken at state level. Large number of students appear in Gujarat every year. This shows that there is no negligence to challenging test nor they have intellectual fear. Looking to the number of students it is believed that at the state level, this test has good response. At the national level second test of the successful is held. This test is organised and implemented by N.C.E.R.T. Successful students are interviewed and scholarships are offered after the careful evaluation.

In getting this scholarship the number of students of Gujarat is very low.

As per the progress report (1985) by T. Rangarajan:

'The performances of Gujarati students is even lower than that of Bihar, Madhya Pradesh, Orissa and Punjab. Maharashtra, West Bengal and Delhi students as far as the selection through National Talent Scholar (NTS) examination is
concerned. Only Assam, Himachal Pradesh, Haryana and Jammu and Kashmir seem to be worse off than Gujarat'.

The reasons for the poor performance of Gujarati students may be as follows:

§ The science syllabus of the Gujarat Higher Secondary Board may be much lower as compared with the all India level.

§ Lack of proper coaching of the students may be another reason for the poor performance of candidates from Gujarat.

§ The scholarship that is available to the students selected for this examinations may be felt by the students in Gujarat as too meagre an amount to enthuse them to put in the hard work needed for passing this prestigious examination.

Thus in Gujarat many students appear every year at the state level examination. Those who get success according to the fixed norms are recommended for the national level examination. However most of such students do not shine out at national level examination and therefore only a few candidates get the scholarships.

It is necessary to find out the reasons of the low performance. Where do the students of Gujarat show poor progress? Do they require some special guidance? Is their personality not proper? Have not they got educational and social atmosphere? Are they lacking in their study habits? A search is necessary to find out answers to these questions.

The investigator therefore pondered over the matter and selected the problem to study those students who shine out at state level but they mostly fail to do the same at national level. In order to study the talented students, it would be necessary to know their achievement, intelligence, creativity, different
aspects of personality, their social, economical and educational background and their individual study habits.

There are other students who can be called talented eventhough they might not have appeared in the state level examination. The absence in the examination may be due to lack of information on their part or just no care attitude, or lack of sufficient incentive or any reason whatsoever may be. The investigator also considered them in the study as a separate group.

These students are referred to as top students as rated high by their teachers. They are also studying together with talented students in the same school. In this study the talented students are referred to as Group A and the top students as rated high by their teachers as Group B now onwards. Whether the factors like intellectual ability, creativity, personality traits, family background, study habits and other factors affect their achievement scores or not is the next question taken for the comparative study.

Thus the investigator decided to study the variables affecting the scholastic achievement of these students.

1.2. STATEMENT OF THE PROBLEM

The problem under study is:

'An Inquiry into the Scholastic Achievement in the Context of Intellectual Ability, Creativity, Personality Traits, Family Background and Other Personal Variables of Talent Search Scholars of Gujarat'.

1.3. EXPLANATION OF THE TERMS

It is very essential on the part of the investigator to explain the connotation and the meaning of the terms involved in the Statement of the Problem. They are:
**Scholastic Achievement**

Achievement means the amount of learning actually completed.\(^5\)

The term scholastic used in denoting relationship to school examination.

In this study scholastic achievement has been considered in terms of performance on the secondary school certificate examination. The percentage of the aggregate marks obtained at S.S.C. examination is taken as scholastic achievement.

**Intellectual Ability**

Binet\(^6\)

The intellectual ability is the capacity to judge well, to reason well and to comprehend well.

Terman\(^7\)

Intellectual ability is the ability to think in terms of abstract ideas.

In the present study intellectual ability is considered as general ability as measured by G.A.T. of Dr. Pallavi Patel.

**Creativity**

Guilford\(^8\)

Creativity is an ambiguous word when it is used in the phrase it means qualities or traits of individuals that predispose them to produce novel ideas and effects.

Taylor\(^9\)

Creativity is the ability and initiative to create new ideas and/or things by the restructuring or redefining of past experiences into new forms.
Torrance

... the process of becoming sensitive to problems, deficiencies, gaps in knowledge, missing elements, disharmonies, and so on: identifying the difficulty; searching for solutions, making guesses, or formulating hypotheses about the deficiencies; testing and retesting these hypotheses and possibly modifying and retesting them; and finally communicating the results.

In the present study the definition of Torrance is considered and originality, fluency, flexibility and total creativity were keenly kept in mind while carrying out the measurement in creativity.

Personality Traits

Personality has been defined by various persons in a variety of ways. (as mentioned in Chapter 2). But in the present study Cattell's definition is taken into consideration:

'Personality is which permits a prediction of what a person will do in a given situation.'

Family Background

There are many aspects which can be considered under the term family background. But in the present study, parents' education and socio-economic status of students have been taken into consideration.

Personal Variables

A number of student's characteristics can be considered as personal variables and it is difficult to study all at a time. Hence in the present study, study habits and birth order of students have been taken into consideration.
Talent Search Scholars

The National Council of Education, Research and Training under its National Talent Search Scheme organize the examinations at two levels for the selection of talented students. The students who succeed at the state level examination are selected by the State for the national level examination. When they appear at National level examination and succeed at the interview as well as examination, they are awarded the scholarships. Thus the selected candidates are known as talent search scholars.

The number of such scholars being small in Gujarat and as it was difficult to contact them personally, the students selected for the National level examination on the basis of their performance at state level examination are considered as talented students of Gujarat in the present study.

Inquiry

Inquiry is general term applicable to any quest for truth, knowledge or information.

Inquiry is 'the act or an instance of "seeking truth", "information or knowledge about something", "examination into the fact of principles"'.

In the present study the investigator has tried to synthesize most of the definitions – cited above by applying her mind to acquire the knowledge about the various variables of talented students as well as the top students as rated high by their teachers, the relationship among them by investigating carefully and closely the above-mentioned ingredients.

1.4 OBJECTIVES OF THE STUDY

The following are the major objectives of the present study.

1. To study the individual as well as joint contribution of intelligence, originality, fluency, flexibility,
total creativity, SES, the factors of personality and study habits in predicting scholastic achievement of talent search scholars of Gujarat.

2. To study the individual as well as joint contribution of intelligence, originality, fluency, flexibility, total creativity, SES, the factors of personality and study habits in predicting scholastic achievement of top students of Gujarat, as rated high by their teachers.

3. To find out the relationship among intellectual ability, creativity, personality traits, SES, study habits and scholastic achievement of talent search scholars of Gujarat.

4. To find out the relationship among intellectual ability, creativity, personality traits, SES, study habits and scholastic achievement of top students of Gujarat, as rated high by their teachers.

5. To compare scholastic achievement of talent search scholars belonging to first, second and above second birth order by taking intelligence and creativity as covariates.

6. To compare scholastic achievement of top students as rated high by their teachers belonging to first, second and above second birth order by taking intelligence and creativity as covariates.

7. To compare the scholastic achievement of talent search scholars in respect of their fathers' educational qualification (upto SSC, graduation and post-graduation) by taking intelligence and creativity as covariates.

8. To compare the scholastic achievement of top students as rated high by their teachers in respect of their fathers' educational qualification (upto SSC, graduation
and post-graduation) by taking intelligence and creativity as covariates.

9. To compare the scholastic achievement of talent search scholars in respect of their mothers' educational qualifications (upto SSC, graduation, post-graduation) by taking intelligence and creativity as covariates.

10. To compare the scholastic achievement of top students as rated high by their teachers in respect of their mothers' educational qualification (upto SSC, graduation and post-graduation) by taking intelligence and creativity as covariates.

11. To compare the scholastic achievement of talent search scholars in respect of each factor of personality by taking intelligence and creativity as covariates.

12. To compare the scholastic achievement of top students as rated high by their teachers in respect of each factor of personality by taking intelligence and creativity as covariates.

13. To compare the scholastic achievement of talent search scholars and top students as rated high by their teachers.

14. To study the difference between the talent search scholars and top students as rated high by their teachers in respect of intelligence, creativity, personality traits, SES and study habits separately.

1.5 HYPOTHESES

The hypotheses built in, taking into view the objectives were:

**Correlational Studies**

**H0₁**

Intelligence is not significantly related to scholastic achievement of talent search scholars of Gujarat.
H02
Originality is not significantly related to scholastic achievement of talent search scholars of Gujarat.

H03
Fluency is not significantly related to scholastic achievement of talent search scholars of Gujarat.

H04
Flexibility is not significantly related to scholastic achievement of talent search scholars of Gujarat.

H05
The total creativity is not significantly related to scholastic achievement of talent search scholars of Gujarat.

H06
The personality traits are not significantly related to scholastic achievement of talent search scholars of Gujarat.

H07
SES is not significantly related to scholastic achievement of talent search scholars of Gujarat.

H08
Study habits are not significantly related to scholastic achievement of talent search scholars of Gujarat.

H09
The intelligence is not significantly related to scholastic achievement of top students of Gujarat, as rated high by their teachers.
Originality is not significantly related to scholastic achievement of top students of Gujarat, as rated high by their teachers.

Fluency is not significantly related to scholastic achievement of top students of Gujarat, as rated high by their teachers.

Flexibility is not significantly related to scholastic achievement of top students of Gujarat, as rated high by their teachers.

Creativity is not significantly related to scholastic achievement of top students of Gujarat, as rated high by their teachers.

The personality traits are not significantly related to scholastic achievement of top students of Gujarat, as rated high by their teachers.

SES is not significantly related to scholastic achievement of top students of Gujarat, as rated high by their teachers.

The study habits are not significantly related to scholastic achievement of top students of Gujarat, as rated high by their teachers.
The adjusted mean of scholastic achievement scores of talent search scholars belonging to first, second and above second birth order will not differ significantly when intelligence and creativity are taken as covariates.

The adjusted mean of scholastic achievement scores of top students rated high by their teachers belonging to first, second and above second birth order will not differ significantly when intelligence and creativity are taken as covariates.

The adjusted mean of scholastic achievement scores of talent search scholars having their fathers' educational qualifications (upto SSC, graduation and post-graduation) will not differ significantly when intelligence and creativity are taken as covariates.

The adjusted mean of scholastic achievement scores of top students as rated high by their teachers having their fathers' educational qualifications (upto SSC, graduation and post-graduation) will not differ significantly when intelligence and creativity are taken as covariates.

The adjusted mean of scholastic achievement scores of talent search scholars having their mothers' educational qualifications (upto SSC, graduation and post-graduation) will not differ significantly when intelligence and creativity are taken as covariates.
Ho22

The adjusted mean of scholastic achievement of top students as rated high by their teachers having their mothers' educational qualifications (upto SSC, graduation and post-graduation) will not differ significantly when intelligence and creativity are taken as covariates.

Ho23

The adjusted mean of scholastic achievement scores of talent search scholars having two levels of each factor of their personality will not differ significantly when intelligence and creativity are taken as covariates.

Ho24

The adjusted mean of scholastic achievement scores of top students as rated high by their teachers having two levels of each factor of their personality will not differ significantly when intelligence and creativity are taken as covariates.

Ho25

The adjusted mean of scholastic achievement scores of talent search scholars of Gujarat will not differ significantly from those of top students of Gujarat, as rated high by their teachers.

Ho26

There will be no significant difference between the adjusted mean scores of talent search scholars of Gujarat and those of top students as rated high by their teachers in respect of intelligence, creativity, personality traits, SES and study habits separately.
1.6 LIMITATIONS OF THE STUDY

The present study has following limitations:

1) The study is limited to students who have been successful at state level examination of the National Talent Search Scheme and have been selected for National level examination at the end of standard X.

2) The study is also restricted to students having same achievement and who are studying in the same class with the talented students and who have not appeared at the National Talent Search Scheme examination. They are referred here as top students as rated high by their teachers in the study.

3) Family background in respect of parents' education and SES of both the groups have been taken into consideration in this study.

4) In this study personal variables such as study habits and birth order of both the groups have been taken into consideration.

5) The study is limited to students knowing Gujarati and Gujarati medium students of Gujarat State.

6) The tools used in the study are not constructed by the investigator, but used for the present work with kind permission of their producers. These tools are standardized on the population of Gujarat State.

7) The percentages of the marks obtained by the students at SSC examination are considered as scholastic achievement in the present study.

8) Dadra Nagar Haveli, though being a separate state, is considered as a part of Gujarat State so far as NTSS is concerned. Hence the sample includes those students also.
1.7 THE SCHEME OF CHAPTERIZATION

The first chapter is devoted to the general background of the study. The significance of the problem is discussed, key words are carefully explained, specific objectives and hypotheses are described and limitations of the study given recognition. Thus the first chapter strives to serve as a pre-view of the research study.

The second chapter deals with theoretical and conceptual background of talented students. The variables taken for the study are also well discussed.

The third chapter deals with the review of the past studies and the work done in the field. The studies that have been done in foreign countries and available in our country are also described. The rationale of the study is given at the end.

The fourth chapter is about the research planning and procedure of the present study. This chapter describes in detail the procedure adopted for the study.

The fifth chapter is about analysis and interpretation of the data. The chapter deals with the study of the scholastic achievement in respect of I.Q. personality, creativity, personal variables, family background of the students of both the groups. The chapter also contains a number of tables, graphs and statistical inferences drawn from the various calculations.

The sixth chapter is the final chapter of compendium. The last chapter deals with the major findings and discussion of the study. Suggestions are also offered with a view to encourage further investigations into the area of talented and gifted students.

Besides this, it also contains necessary graphs, tables, appendices and exhaustive bibliography at the end.
References


